

Cultural Resources Management Plan 1984



Timpanogos Cave National Monument

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CULTURAL RESOURCES MANAGEMENT PLAN

Timpanogos Cave National Monument

I. INTRODUCTION

A. Plan's Purpose

A Cultural Resources Management Plan is an action plan, long range in scope, which identifies and evaluates a park's cultural resources and needs. As a component that works in conjunction with the park's General Management Plan and/or Cultural Development Concept Plan, the Cultural Resources Management Plan describes for park management the known cultural resources within the park area and addresses specific problems, issues, and influences that have a bearing on the management of those resources. In addition to prescribing actions and ultimate treatments, the Cultural Resources Management Plan also lists specific research needs and management documents necessary to effectively manage cultural resources.

Developed and agreed upon by the park and the Region, the Cultural Resources Management Plan proposes interim or final treatment, and use of all known cultural resources within the park area. Except in an unexpected emergency situation, all actions taken with regard to those resources are to adhere to this plan. It is intended to be agreed upon by both the Park Superintendent and the Regional Director. The use of a looseleaf notebook format permits individual changes to be incorporated without completely revising the plan.

B. Qualifications

1. **Coordination With Current Planning:** The plan is based on presently approved planning documents, and, as others are completed, management decisions regarding park cultural resources may be changed such as may occur in the near future when the General Management Plan is finalized. Decisions which are not based on approved planning documents or other decision-making documents were arrived at through interdisciplinary evaluation changes to be incorporated without completely revising this plan.
2. **National Register Eligibility:** Since "NPS-28-Cultural Resources Management Guidelines" established policy with regard to cultural resources managed by the NPS, it is expected that the Superintendent and his staff will be familiar with the content of this document and, further, have copies readily available for reference. It should be noted that NPS-28 regards all properties currently included on the List of Classified Structures (LCS) as being potentially eligible for nomination to the National Register of Historical Places until they have been officially declared ineligible by the appropriate review authorities.

C. Prehistory/History

Hidden behind the rather severe countenance of the western face of the Wasatch Range are many distinctive beauties. Such a spot is to be found in the canyon of the American Fork River where a person may view the splendor, created in part by the small stream whose relentless action has gouged a narrow V-shaped gorge in the mountainside. The spectacular scenery alone is reason enough to draw people into this area but there are many other reasons for people to travel into the canyon and an important one is Timpanogos Cave National Monument.

Mt. Timpanogos is at the approximate mid-section of the series which form the north-south trending Wasatch Range. The peaks of the Wasatch rise as much as 12,000 feet and average about 10,000 feet in elevation. To the west of the range is the northeast section of the Great Basin province which was occupied by Lake Bonneville. Rising abruptly along the eastern borders of the Salt Lake and Utah valleys, the mountains tower about 7,000 feet above the lowlands. This sharp escarpment is, in part, attributed to the great Wasatch Fault which extends along the western front of the range. When the Wasatch mountains were uplifted, the sedimentary rocks broke in many places and it is along two of these local faults that the three caves in the Timpanogos group are found.

When white men first gazed upon Utah Valley and the majestic mountains which encircle Utah Lake, the region was inhabited by Indians who belonged to the group known as the Utas (also spelled Eutaws, Yutas, Utahs, etc.). The tribes living along the shores of the lake called themselves Timpanogotzis, or "Fish Eater," which was derived from the lake Timpanogos (Utah) around which they lived. (Some historians give the meaning of Timpanogos as "rock" or "rocky.") In any case, these people were described by early explorers to be peaceful and industrious. The land on which they lived was fruitful and the Indians apparently enjoyed a varied diet by fishing in the lake, raising corn and other crops, and by hunting both large and small game.

Evidence that prehistoric peoples used the canyon of the American Fork River is to be found within the monument boundaries. One primitive painting and traces of at least one more have been found on a quartzite ledge which extends almost to the edge of the river at a point opposite the monument's administrative area, site number 24UT417. The discernable figure, about ten inches high and six inches wide, appears to have the body and appendages of a man; however, the V-shape of the figure and the large ears resembles that of a mule deer. A reddish coloring substance was used and it seems to have penetrated the quartzite to a slight degree. Near the paintings are a number of small pockets or niches in the ledge containing small desiccated corn cobs.

Other signs of primitive man were found in a small cave located outside of the monument about two miles up the canyon on the northern slope. Excavation of this cave was performed in 1938 by George B. Hansen of the Brigham Young University geology department. Cultural remains excavated from the cave included artifacts of stone, bone, wood, and fiber. The stone items included arrow points of fine workmanship, spear points, scrapers, knives, metates and manos. Awls, flakes, chisels, gaming pieces, beads and other ornaments were

found made from bone. Wooden objects were few in number, these being mostly arrow shafts. Ropes and cords made of various animal and vegetable matter were also unearthed. Potsherds were dark, fire-blackened, unglazed and only one piece was decorated.

Of the many bones uncovered, those of three types of animals were of particular interest since none is now common to the area. They included one prairie dog, which now ranges to the north and east; three bears, having skeletal differences which indicated distinct types, but all probably allied to the Brown Bear; and a mountain sheep.

The cultural items tentatively establish the period of occupancy as immediately pre-European and the origin of the inhabitants as the ancestral Shoshone from which the Utes are descended.

The first white man to record the scene around Utah Lake was the Spanish priest, Fray Silvestre Velez de Escalante. He was a member of the expedition headed by Fray Francisco Antanxio Dominiguez that was seeking an overland route from Santa Fe, New Mexico to the missions in California. On September 25, 1776, the group headed by these Franciscans entered Utah Valley through Spanish Fork Canyon. This was to be the farthest point of exploration of the trip. The explorers went as far north as the present site of Provo and from vantage points picked out and named some of the major geological features. Utah Valley was named Nuestra Senora de la Merced (Our Lady of Mercy) while the American Fork River, which was identified by the grove of trees along its banks, was termed the Rio de Santa Ana. Recognizing the natural richness of the area, Fray Escalante recorded in his journal the promising future the region would offer to settlement. Envisioning irrigation of the sheltered valley, grazing in the mountains - which also promised mineral wealth, abundant fuel, and water - he could see all of the communities that were soon to spring up in the valley.

By the early 1800's, Spanish and later American fur trappers were active along the streams feeding Utah Lake. According to George F. Shelley, "the lake was considered the nucleus of a water system and the streams running into it were known as forks." Probably because of the activities of the Americans along one such stream, it was given the name, "American Fork River."

By the end of 1847 the vanguard of Mormon pioneers were creating a city near the shores of the Great Salt Lake in what was then Mexican territory. Within two years pioneers were being sent from the burgeoning city to develop other communities preparatory to forming the State of Deseret. In 1850, first American Fork, and then the communities of Lehi, Pleasant Grove, and Alpine, were settled in the immediate vicinity of the American Fork Canyon,

Because of the increasing tension between the Northern and Southern States, troops of the controversial "Johnston's Army," who were stationed at Camp Floyd southwest of Salt Lake City, were withdrawn in 1861 and reassigned to posts in the east. These troops had been sent to the territory to quell the "Mormon Rebellion." The army's presence in the valley had had a quieting effect on the Indian people, but, emboldened by the withdrawal of the military forces, they threatened settlements and the overland routes to the west coast. To control the situation, in 1862 soldiers were sent to Utah from California to stations at Camp Douglas a

few miles east of Salt Lake City. Many of those troops had been miners and prospectors during the California Gold Rush of 1849 and soon became aware of the abundant mineral deposits in this region. One group of soldiers prospecting in the Oquirrh mountains discovered rich deposits in Brigham Canyon and since then many millions of dollars worth of metalliferous ores have been extracted from the various mining districts found in central Utah. Though the variety of minerals were encountered in the mines of the region are great, the most valuable and exploited deposits are the ores of lead, zinc, silver, copper, and gold.

In 1865, the first legitimate mining claim was established in the Wasatch Mountains near Alta, Utah, by Silas Brain; concurrently other claims were made in this area. Then, in 1869, J.B. Woodman located the very rich Emma ore body and the boom was on in the fabulous Cottonwood District.

The American Fork Mining District did not experience intensive mining activity until 1870 when a fairly rich deposit was found at the Miller mine in the drainage basin of the North Fork. After the Miller discovery many prospects were opened but only a few proved successful. By 1880, the few mines that were producing in the district had depleted their known reserves and for the next decade operations were limited to development work and small leases. Occasionally a rich pocket, such as the Tyng, was found in the area which renewed interest, but additional finds were of limited extent.

Envisioning large scale mining in American Fork Canyon, a group of easterners headed by William K. Vanderbilt financed the construction of a narrow gauge railroad from the town of American Fork. The railroad was originally planned to extend to the mining camp at Forest City but steep grades prohibited the completion of the last few miles and it was terminated at Deer Creek. Operation of the line commenced in 1872 but it was short lived and, by 1878, the tracks had been torn up for salvage. The old railroad bed, which paralleled the American Fork River, later proved useful as a wagon road and part of it is still being used by Utah State Route U-92 which serves the canyon. Within the monument a small section of the old road is also used for a picnic area, being one of the few level spots on the canyon floor.

While the wealth derived directly from the mines in the American Fork District was limited, the benefits accrued indirectly were available to all who wished to partake of them. Without a doubt the mining boom spurred the opening and development of the rugged canyon and today more than one million people annually enjoy the drive over the "Alpine Scenic Route."

In the fall of 1887, Martin Hansen was cutting timber high upon the south wall of American Fork Canyon. One day, when it was time to return home in American Fork, he left his ax by the partially trimmed tree on which he had been working. That night a light snow fell and powdered the countryside. Returning to work the next morning, Mr. Hansen noticed the tracks of a mountain lion in the snow near the fallen tree. Taking his ax, he followed the spoor onto some higher ledges; there, they led him into an opening in the cliff face. Going a short way into the opening Mr. Hansen suddenly realized that should he corner the lion, his only weapon was his ax. Turning back towards the entrance he observed that the floor was littered with bones and other debris. Resuming work, Mr. Hansen made mental note of the location of the cave with the intent of exploring it further at the first opportunity. Mr. Hansen

later returned to do his exploration .and eventually developed a trail to the cave and conducted tours for a number of years.

During the winter of 1892-93, unknown to Mr. Hansen, a few men from a neighboring town mined the cave for the “onyx” deposits. These men had filed the cave as a mining claim and, working on contract with the Duke-Onyx Company of Chicago, Illinois, stripped the cave of its decorations and destroyed its scenic value.

On August 8, 1915, James Gough and Frank Johnson, who had been exploring American Fork Canyon for other caves, found what they called “Lone Star” cave near Hansen Cave. Subsequent to the find, James Gough's father filed a mining claim on the cave; however, shortly thereafter, the Gough family moved to Idaho, Frank Johnson was killed in an automobile accident, and the caves existence sank back into obscurity.

By 1921 Hansen Cave was becoming fairly well known and large numbers of people began to take summer outings into American Fork Canyon to look for caves. On August 4, 1921, Vearl J. Manwell was on such a trip when he found the sealed-over entrance to the previously discovered “Lone Star” cave. After some exploring he gave it its present day name, Timpanogos Cave.

On October 15, 1921, George Heber Hansen and his nephew Wayne E. Hansen were deer hunting on the north slope of American Fork Canyon near Hansen and Timpanogos Caves. Around mid-day, during a lunch break, they were scanning the canyon with field glasses and spotted another opening in the canyon wall between the two caves. Not being too successful with the hunt that day they decided to investigate this “find”; however, after hiking across the canyon to the entrance, they decided it would not be safe to venture inside without proper equipment and they left the exploration to another day. Some days later after they had explored the cave with some friends, it was christened “Middle Cave.”

On August 23, 1921, Forest Deputy Supervisor Walter G. Mam and Ranger Vivian N. West of the Wasatch National Forest established the Hansen-Timpanogos Cave complex as a “Public Service Site” in order to protect it.

In the fall of 1922, Regional Forester R. H. Ruthledge of Ogden wrote to the Chief Forester in Washington, D.C. asking that the complex be established as a National Monument and on October 14, 1922, President Warren G. Harding created Timpanogos Cave National Monument under the authority of the Proclamation Act of June 8, 1906 (34 Stat. 225). It was administered by the U. S. Forest Service until 1934 when it was turned over to the Department of the Interior, National Park Service.

D. Theme Representation

The cultural resources of Timpanogos Cave are represented in the following themes:

1. Prehistoric Man
2. Architecture
3. Tourism

1. Prehistoric Man: Timpanogos Cave has only one isolated Fremont pictograph located on a cliff face behind the housing area, site number 24UT417. This red-painted anthropomorph most closely resembles what Schaafsma (1971:8-25) calls the Vernal Style, although the elaborate head gear generally appears to be lacking. Both Schaafsma (1971:126-127) and Turner (1961:1) date Fremont rock art somewhere between A.D. 1000 and 1200.
2. Architecture: Included within the Timpanogos Cave Historic District are the following:
 - Residence #2
 - Stone Bridge over the American Fork River to Residence #2
 - Comfort Station #126
 - Comfort Station #127
 - Root Cellars (2)
 - Storage Building - Old Ticket Office
 - Old Cave Trail

All of these properties were placed on the National Register of Historic Places in 1982.

3. Tourism: Included within this theme are the Comfort Stations #126 and #127 and the Storage Building once used as a Ticket Office.

(Note: For discussion of interpretive application of these themes, see 1983, GMP/DCP/Interpretive Prospectus)

II. MANAGEMENT POLICIES

A. Legislation, Regulation, and National Park Service Guidelines

1. Pertinent Legislation and Regulations: Park cultural resources shall be managed in conformity with the following applications, legislations, implementing regulations, and executive orders:
 - Antiquities Act (1906)
 - Historical Sites Act (1935)
 - National Historic Preservation Act (1966: Amended 1980)
 - Executive Order 11593 (1971)
 - National Environmental Policy Act (1979)
 - Archeological Resources Protection Act (1979)
 - 36 CFR Part 800 "Protection of Historical and Cultural Properties" (1974)
2. National Park Service Documents:
 - NPS-28, "Cultural Resources Management Guidelines," (March, 1982)
 - NPS-6, "Interpretation and Visitor Services Guidelines," (March, 1980)
 - Rocky Mountain Region, Inventory of Archeological Sites Program Manager's Brief, (1978-1980)

B. Cultural Compliance Statement

1. Archeological Compliance: As stipulated in NPS-28 and further enhanced by Executive Order 11593, any project that has potential to impact archeological resources must be preceded by a survey of the project area conducted by a professional archeologist and an evaluation of all resources must be made for possible inclusion in the National Register of Historic Places. The Regional Archeologist coordinates this work in response to the line item, lump sum and other programs coordinated through the Regional Office. The park must advise the Regional Archeologist of all day-labor ground disturbing activities so together they can ascertain the need for archeological compliance work and insure its implementation in a timely manner.
2. Programmatic Memorandum of Agreement and Assessment of Effect Form: Section 106 Compliance is afforded by the Programmatic Memorandum of Agreement (POMA), negotiated between the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historical Preservation Office (SHPO). The POMA provides that when this Cultural Resources Management Plan is approved, implementing actions affecting historic properties and archeological resources defined by NPS-28 will normally not be reviewed by the Advisory Council on Historic Preservation and will be identified

as meeting NPS-28 standards by the Regional Historian, Archeologist, Historical Architect, and Curator, with final approval given by the Regional Director. For these projects, the Superintendent must complete the Assessment of Effect (see Appendix) and submit it to the Regional Historic Preservation Team (RHPT) at least 30 days prior to the inception of the project. The SHPO usually is provided a 15 day review period.

The Programmatic Memorandum of Agreement also allows the RHPT to evaluate and certify “energy management” or “preservation maintenance” projects affecting any historic property or archeological structure in the Rocky Mountain Region. The Superintendent should first seek guidance from the Regional Office as to whether a project will qualify as energy management or preservation maintenance (i.e. like-kind replacement) and then submit an Assessment of Effect. This should be submitted at least 15-days prior to the inception of a project. The SHPO is not usually included in this review process.

3. Section 106 Compliance Procedures: For actions not covered by this plan there is an alternate way to achieve Section 106 compliance. When the Superintendent anticipates a project will affect an LCS property or an archeological site, he should immediately notify the RHPT and provide it with the following information: 1) a complete description of the project; 2) the impact(s) of the project upon the resource and; 3) appropriate supporting documentation (i.e. photographs, drawings, plans, etc.). The RHPT will review the documentation and either concurs or returns it to the Superintendent with an explanation as to why the project cannot be accepted or must be modified to protect the resource. If the project is accepted and the level of effect is determined, it will be submitted in a suitable format to the SHPO and the Advisory Council on Historic Preservation (ACHP). “Adverse Effect” actions require documentation with the SHPO and the ACHP to develop a “Memorandum of Agreement” that sets the appropriate level of mitigation for the adverse effect. At least 120 days should be allowed for the completion of the review process.
4. Report of Survey (DI-103): The removal or demolition of any historic property, unless officially declared ineligible for nomination to the National Register, must be preceded by appropriate compliance procedures. Review by both the State Historic Preservation Officer and the Advisory Council on Historic Preservation is required.

Preparation of a “Determination of Eligibility” for nomination to the National Register may be necessary if not previously initiated. Requests to remove or demolish historic properties must be accompanied by the following documentation: 1) rationale for the decision; 2) pertinent data about the structure or site, including but not limited to, date of construction, date(s) of significant modifications, and significant persons or events associated with the property and; 3) 35 mm, black and white photographs showing all elevations and significant architectural details. Since removal or demolition is an “adverse effect”,

additional documentation and photographs and/or measured drawings may be required before compliance is final. The Superintendent should submit the request at least 120 days prior to the intended removal or demolition.

5. National Register of Historic Places Nominations: National Register nominations are prepared by the RHPT and/or qualified park personnel. The completed form is submitted at least to the park, if not the originator, for review. Subsequently, it is reviewed by the Cultural Resource Management (CRM) Office for signature and submitted to the Keeper of the National Register for signature and inclusion.

Determinations of Eligibility usually follow a 10-day process, but frequently require a longer period of time to complete since review includes the SHPO, the Washington CRM Office, the National Register (assuming concurrence by the National Park Service), again by the SHPO, and the Keeper of the National Register. The regular nomination process may be determined ineligible by agreement between the NPS and the SHPO. Properties of questionable significance, where the NPS and the SHPO disagree, are determined eligible or ineligible by the Keeper of the National Register.

C. Park Historical Structural Statement

1. LCS Survey Document: The LCS is an inventory of all above-grade historic and prehistoric structures in which the National Park Service owns or will acquire any legal interest that merit preservation for their archeological, historical, architectural, or engineering values. The LCS is maintained in the Washington Office and serves to assist park managers in planning and programming appropriate treatment and in recording decision regarding listed structures. The full scope and provisions of the LCS are discussed in NPS-28, Chapter 3.

The total number of historical structures at Timpanogos Cave National Monument listed on the LCS stands at six (6). The LCS status regarding historic structures is complete at this time (1982).

2. Resource Preservation Intent Statement: The primary activity of historic preservation efforts at Timpanogos Cave National Monument will be routine and cyclic maintenance of the structures listed on the LCS. Some interior updating may also occur.

This Cultural Resources Management Plan calls for a preservation policy of continued use of these historic structures here at Timpanogos Cave National Monument.

3. Documentation Statement: National Park Service documentation studies dealing with cultural resources cope with a variety of subject matter. Some types of studies include:

- a. Historic Structures Report (HSR): Provides the historical, archeological, and architectural information necessary for carrying out the appropriate level of treatment of an historic structure and its setting (preservation, restoration, or reconstruction).
- b. Historic Resource Study (HRS): Identifies, evaluates, and makes recommendations concerning the historic resources of a proposed/existing area of the National Park Service.
- c. Historic Structure Preservation Guide (HSPG): A specific guide for conducting routine and cyclical maintenance on a structure that has reached its intended ultimate level of treatment. HSPG's are normally written for Management Category A or B structures only.
- d. Historic Furnishing Study: Provides documented evidence of furnishings of an historic structure at a particular time in its history and guides the accurate refurnishing of that structure.
- e. Historic American Buildings Survey (NABS): Records historic structures through historical research, location maps, photographs (4x5 negatives), and, when indicated, measured architectural drawings for deposit in the Library of Congress. The Historical American Engineering Record (HAER) is similar to NABS but deals with engineering-type structures. NABS/HAER documentation may be required as mitigation for "adverse effects" actions involving LCS structures.
- f. Construction Drawings: In the form of plans and specifications, these are an excellent form of structural documentation. These may represent original conditions or later modifications, depending on when they were produced.

D. Historical Sites Statement

There are no known park historical sites at Timpanogos Cave National Monument.

E. Archeological Statement

1. Survey Status and Description: The only known archeological resource in Timpanogos Cave National Monument is an isolated Fremont pictograph located on a cliff face behind the housing area, site number 24UT417.
2. Documentation: In 1975 Francis A. Calabrese and Adrienne B. Anderson completed an archeological reconnaissance to assess the area's needs under Executive Order

11593 and evaluate the potential impacts of a pending pipeline replacement on the monument's cultural remains. Their report provides the best summary of the park's archeological remains.

F. Park Scope of Collection Statement

1. Introduction: The park museum collection is defined as being those objects determined to be of such relevance to the park story and its significance to the nation's past that they shall receive the care necessary to preserve them in perpetuity. The museum collection is restricted to those objects that are catalogued into the National Park Service records system.

The National Park Service permits and encourages the acquisition of museum objects by field collecting, gift, loan, exchange, or purchase, in accordance with established procedures when these objects are clearly significant to Service areas.

The successful execution of this policy requires that the day-to-day decisions on what museum objects to acquire, and which to reject or eliminate, be wise and well-planned. This Statement is a guide to sound growth and is a guard against the random expansion of the museum collection.

The goal of this collection is that it will not contain any more or any less than is both useful and necessary. Since two major universities are located within thirty miles of the Monument, there is little need for large generalized collections at the park. Therefore, the museum collections will be limited to those items which are directly related to the primary resources (the caves) or are unique items directly related to the Monuments human or natural history. Those items in the present museum collection which do not meet this criterion will be deaccessioned and transferred to the study collection.

2. Theme Representation: This park is primarily a natural area, but it also contains history of human activity. Therefore, the park museum collection will consist of primary and secondary themes.
 - a. Primary Theme-Geology: The collection as it now stands is incomplete and has not been properly maintained for several years. The collection should contain no more than two samples of each recognized geologic formation in the park except when variations in the composition exist and where structure of any type of formation requires it. The collection should also contain samples of various biologic and geologic fossils as well as cave formations, not to exceed two of each species or type.
 - b. Secondary Theme-Flora and Fauna: (Generally to be transferred to the study collection)

- Birds: A number of specimens have been in the collection since 1935 and are beginning to show wear. These should be culled. Care should be taken to label each specimen correctly and permanently.
- Mammals: The current collection is quite small. Herbarium: The present collection is small.
- Insects: A great variety of insects have been collected and catalogued to date.

c. Secondary Theme-Man

History and Archeology: A number of miscellaneous prehistoric and historic artifacts have been acquired over the years. A small collection of projectile points has been donated to the park and are on exhibit in the visitor center. A small number of pioneer farm implements are also on exhibit.

History collections should be restricted to those objects directly related to the early establishment days of the park. Exceptions will be made only by the Superintendent.

3. Archival Collection: The park's official operating records will be under the control of NPS-19 "File Management Handbook" (March, 1977): it's "Records Scheduling and Disposition" supplement, as well as the General Services Administration's "General Record of Schedules" (Regulation 3, Appendix B). Museum and Library collection records will be exempt from these guidelines.

- a. Library Collection: The park library books are catalogued according to the Dewey Decimal System. The Timpanogos Cave National Monument library is small and composed mainly of natural history subjects but with some Indian, historical, and environmental references. The library is used by the permanent and seasonal staff and "interested visitors." Due to limited shelf space, careful consideration should be given to any additions to the library. Only volumes necessary to keep pace with changes pertinent to Timpanogos Cave National Monument and the National Park Service should be added.

Since space is limited, all books in our collection are evaluated as to their usefulness or value. Books considered historically valuable as reference about Timpanogos Cave or the immediate area, or useful in other aspects of park operations including management, supervision, administration, maintenance, law enforcement, resource management, and related subjects, are retained in the library. Books which are no longer needed are donated to other libraries.

Primary sources for the library include papers, books, and manuscripts

(including diaries, historic interviews, research papers, etc.) which relate directly to Timpanogos Cave. Secondary sources include general information on a variety of subjects, including history, geology, archeology, energy, astronomy, management, law enforcement, conservation, resource management, and other subjects required by employees.

- b. Slide Collection: The park's slide collection has received little care in the past. Master slides have not been separated from duplicates and both have been used in slide programs. Many have been damaged or lost.
4. Museum Collection: The museum collection will be managed according to NPS-28, NPS-6, the approved "Scope of Collection Statement", and the approved "Collection Preservation Guide." Ralph A. Lewis's "Manual for Museum" and the National Park Service's "Museum Handbook" will also be used.

The park museum collection is divided into two segments: catalogued and uncatalogued items. All catalogued museum items are part of the park's permanent collection maintained for use by scientific researchers, employees studying scientific specimens, or in interpretive exhibits. They serve as a permanent record of what has been found in the park.

All catalogued items are kept in locked cabinets. No items are permitted to be used or removed from the museum area without the approval of the Chief Interpreter. Handling of items by the general public, such as during interpretive programs, is not permitted. Many catalogued items have been badly damaged or lost because this procedure was allowed in the past.

Special Care Procedures:

- a. Geology Specimens: Some items are quite fragile and should be handled with utmost care. Those items in groups (i.e. with the same catalogue number) should be kept together at all times.
- b. Archeology Specimens: These are to be handled with care and grouped pieces are to be kept together.
- c. Mammal Specimens: The dried skins are often brittle and must be handled very gently. Special care must be taken of the ears, legs, and tails since they break particularly easily. Mammals should be stored on their stomachs, not their backs. They should be slightly separated from each other to prevent wearing away hair. Boxes should be lined with brown paper and changed as necessary.
- d. Bird Specimens: Birds should be stored on their backs, slightly separated from one another. Boxes should be lined with brown paper and changed as

necessary. Again, special care must be taken of legs, tail, wings, and beak due to their fragility.

- e. Reptile/Amphibian/Fish Specimens: These specimens are stored, in most cases, in alcohol. A label identifying the specimen should be kept inside the jar and one should also be attached to the outside. Alcohol should cover the entire specimen and be replaced as needed.
 - f. Insect Specimens: Insects are, for the most part, mounted on a pin in a drawer in the insect cabinet. A few specimens may be kept in small jars of alcohol. All information on pinned insects should be written on small labels on the pin below the insect. Those in alcohol should be labeled both on the inside and outside of the jar. Pinned insects should not be removed from the drawers nor should they be handled as they are very fragile.
 - g. Plant Specimens: Plants are pressed and attached to a herbarium sheet. A label attached to each sheet identifies the plant and provides collection information. Stacks of herbarium sheets are stored, by plant family, on shelves in the herbarium cabinets. These are very easily damaged by improper handling. They should' never be stored in areas of extreme heat or cold.
5. Study Collection: The study collection is maintained to provide a number of items which can be handled by employees on a regular basis and used in demonstrations or interpretive programs. No more than two specimens of each species or two examples of each geologic or archeological specimen will be kept in the study collection.

Study specimens will be cared for in exactly the same was as the catalogued museum collection and, except for tagging, the procedures outlined above should be followed. A recorded book will be kept on the study collection listing the number of the item and data on the item. The items may be disposed of when they become too badly damaged or are no longer of value. The item is to be crossed of the record book when it's disposed of and a justification for it's disposal will be noted in the book.

6. Acquisition: There is no indiscriminate collecting permitted in park. All collecting must be done in accordance with established rules and regulations. Gifts must be unconditional. Loans must be for a specific purpose and for a definite length of time. Objects left at the park for possible acquisition shall be receipted and either accepted or returned within 30 days.

If an item is found or returned as a potential museum specimen, all available data will be gathered on the item, including the date, who found it, where it was found, condition of the object, any history on the object, etc. It will be delivered to the Chief Interpreter who will determine whether the item is needed in the collection.

The Scope of Collection Statement permits the collection on only one, or possibly two (if rare), specimens of each animal species to be catalogued as museum specimens. The same is true for geologic specimens. Pieces of what was once one object or rock will be catalogued as one specimen, with each piece having the same number.

III. CULTURAL RESOURCES INVENTORY

A. Historic Structures Inventory, LCS Matrix Form

The List of Classified Structures Survey Matrix is a management tool that has been developed and included in this Cultural Resources Management Plan. Its purpose is to indicate to Park Management the current status and intended treatment of any particular historic structure covered under either this plan or current DCP's or GMP's. The scope at Timpanogos Cave was discussed in the previous section, and the LCS Survey Matrix summarizes that information on a building specific basis. The categories of information found on the matrix will be briefly discussed.

1. **Resource:** The first item of information found on the matrix is the name of the resource, and its location if it is in an easily identified area or district. If the location has not been indicated then the List of Classified Structures Base Map in the Appendix should be consulted.
2. **LCS Number:** The LCS Number indicated after the name of each structure is also the official building number established by the park. Since the park building is usually referred to by its building number, all resources on the matrix are listed in numerical order for easy reference. The "HS" designation denotes historic structure status and should always be used in conjunction with the number in all correspondence regarding such a building.
3. **Management Category:** Each Cultural Resource entered on the List of Classified Structures has one of four Management Category designations assigned to it. The four Management Categories are described in NPS-28, Chapter 3 and it is recommended that Park Management be familiar with them. Note that all structures listed on the LCS are eligible or potentially eligible (unless otherwise determined) for the National Register and appropriate compliance procedures must be followed. The category designations are:
 - Structures must be preserved and maintained.
 - Structures should be preserved and maintained.
 - Structures may be preserved and maintained.
 - Structures can be demolished, disposed of, or altered for some other management purpose.
4. **National Register Status:** Following the Management Category designation on the matrix is information regarding the National Register status of each listed historic structure. The information includes:
 - a. Level of Significance - either local, state, or national.
 - b. Eligibility - there are seven possible entries:
 - 1) Listed and documented.

- 2) Listed and undocumented.
 - 3) Determined eligible by National Register Keeper.
 - 4) Determined eligible by State Historic Preservation Officer.
 - 5) Determined potentially eligible by Region Historic Preservation Team and Park.
 - 6) Undetermined - no action initiated.
 - 7) Determined ineligible by State Historic Preservation Officer.
 - 8) Nomination Status - date of action.
5. Management Policy: This category specifies the course of action agreed upon between the park and the Region which will guide present and future actions affecting any listed structure. The alternatives include preservation, restoration, adaptive use, removal, and natural deterioration'(moldering). In some cases it is possible for the exterior of a structure to have one management policy-while the interior has-another.
6. Treatment: There are a number of possible treatments that may be necessary to carry out the management policies for historic structures listed on the matrix. These include:
- Routine and cyclic maintenance
 - Continuation of present use
 - Health, life, safety modifications
 - Stabilization
 - Upgrade interior
 - Restore/preserve exterior
7. Requirements: The agreed upon management policy for a particular historic structure listed on the matrix may necessitate additional measures before it can be implemented. The requirements listed below are discussed in greater detail in section II: "Management Policies Affecting Cultural Resources."
- National Park Service Documentation:
- Historic Structure Report.
 - Historic Resource Study
 - Historic Structure Preservation Guide
 - Historic Furnishing Study
8. Decision Assessment: Decisions regarding cultural properties were made based upon approved planning documents, other approved decisionmaking documents, or after evaluation and assessment by an interdisciplinary team in the Regional Office and Park. This supporting documentation is identified in the matrix as either GMP, DCP, or IT (Interdisciplinary Team).

9. Remarks: The “Remarks” column on the matrix is for noting anything pertinent to any historic structure listed. The suggested list below deals with planning issues:
 - a. Completed document
 - b. Complete treatment
 - c. "D" Management category explanation
 - d. Program Requirements:
 - 1) PRIP
 - 2) Completed Resource
 - 3) Cultural Resource Program Packing

B. Archeological Inventory

1. Inventory: The park's archeological inventory consists of one known site.
2. Priority Listing: One site within the park.
3. Planning Document Analysis: Does not apply to Timpanogos Cave.
4. Treatment: All archeological sites within the park are protected by Federal legislation (Antiquities Act of 1906, Archeological Resources Protection Act of 1979, Executive Order 11593) and National Park Service Historic Preservation Policies (NPS-28).
5. Legislative Compliance: No archeological sites are listed on, determined eligible for, or appear to meet the criteria of significance for listing on the National Register of Historic Places.

IV. ALTERNATIVES

Problem: Inventory and Classification of Items In Park Collection

The various park collections - photographs, slides, archeological: materials, plant materials - have not been completely inventoried or properly classified.

Alternatives:

1. NO ACTION: Under this alternative, park collections will remain in their present condition with the resultant impact on research and interpretive programs.
2. USE OF PARK STAFF: Existing personnel will inventory and classify the collections as time permits. This will delay considerably the completion of this work and will have an impact similar to the NO ACTION alternative.
3. USE OF CONTRACT PROFESSIONALS: Competent professionals will be selected to complete the required work as quickly as possible. Funding for this work would have to be requested and may not be possible to secure at this time.

Selected Alternative:

The park's collection will be completely inventoried and properly classified. The park will maintain a small and very specific collection of appropriate items and those items not directly related to the resource of the park will be properly disposed of.

Problem: Museum Collection Management

The collection has not been inventoried, maintained, or stored according to the standards prescribed in NPS-6, "Interpretation and Visitor Services."

Alternatives:

1. NO ACTION: Under this alternative the park will continue to be out of compliance with NPS-6. Additionally, the collection will be under-utilized, specimens will be lost or possibly stolen, and they will continue to deteriorate.
2. USE OF PARK STAFF/PRESENT FACILITY: The collection will remain in the present storage facility which has no controls on access, temperature, humidity, or light, as well as no safe-guards against fire or burglary. Park staff will be used to properly inventory the collection; however, this will not satisfy the requirements of NPS-6.
3. USE OF STAFF/ADEQUATE FACILITY: A 10-238 will be programmed for the storage of the collection under the controls stipulated by NPS-6. The Park Staff,

assisted by Regional personnel, will inventory the collection. This will bring the park into compliance with NPS-6 and will result in the maximum permissible use of the collection.

Selected Alternative:

Programming of a 10-238 for proper storage of the collection, and inventory completed by park staff, is the preferred alternative. If possible, existing buildings will be used to house the collection but funding will have to be provided for the adaption of space with needed controls.

Problem: Archival-Library Management

Archival-Library material has not been catalogued, maintained, stored, or disposed of according to the standards prescribed by NPS-6, NPS-19, or the General Services Administration's "General Records Schedule" (Regulation 3, Appendix B).

Alternatives:

1. NO ACTION: Under this alternative, the park will continue to be out of compliance with park policy and pertinent federal guidelines.
2. USE OF PARK STAFF/PRESENT FACILITY: Materials will remain in present location with no controls on access, temperature, humidity, or light, as well as no safeguards against fire or burglary. Park staff will be used for proper cataloguing but there will be no provision for proper storage/care requirements as stipulated in NPS-6.
3. USE OF PARK STAFF/ADEQUATE FACILITY: A 10-238 will be programmed for housing of these materials as stipulated in NPS-6. Park Staff will catalogue, dispose of, and develop appropriate user policies in conformity to NPS policy and pertinent federal guidelines.

Selected Alternative:

Programming of a 10-238 for proper housing of archival-library materials, and the cataloguing/disposal completed by Park Staff is the preferred alternative. If possible, existing buildings will be used to house collection but funding will have to be provided for the adaption of space with needed controls.

V. BIBLIOGRAPHY

A-1 Anthropological/Archeological References:

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Schaafsma, Polly; 1971, The Rock Art of Utah; Peabody Museum of Archeology and Ethnology;. Paper 65, Cambridge, Massachusetts.